# The Hospital IT Working Group - Strategy Paper

## 1 Executive Summary

This document has been developed by the Hospital IT Working Group (HospIT WG) in collaboration with the Data Coordination Center (DCC) of the Swiss Personalized Health Network (SPHN).

It describes the overall Hospital IT strategy on how to achieve Swiss-wide, technical interoperability of health data through the SPHN initiative.

## 2 Vision Statement

Our vision is to foster openness and collaboration among the ICT departments of the Swiss University Hospitals in order to build together a harmonized IT infrastructure that will enable Swiss-wide health data interoperability and will fulfill the mission of SPHN.

## 3 Mission Statement

The mission of the HospIT WG is to represent the hospital ICT interests and requirements within SPHN and to provide recommendations and guidelines regarding the implementation and adoption of technical solutions and standards necessary for the harmonization and development of the Swiss-wide IT infrastructure.

The HospIT WG is composed by representatives of the ICT teams of the five Swiss University Hospitals and collaborates closely with all other SPHN/DCC working groups and the BioMedIT group.

### 3.1 Values & Guiding Principles

Our guiding principles are:

- Team Work
- Transparency
- Pragmatism
- Feasibility
- Sustainability

## 4 Strategy

The mission of the HospIT WG is complementary to the one of the other DCC working groups. The work of the HospIT WG aims at bridging the gap between the hospital's ICT and the other DCC working group's requirements. The HospIT WG is, as part of the SPHN Network, responsible for identifying and prioritizing IT technical needs and for harmonizing the processes and IT infrastructures that will ensure interoperability and effective data sharing on technical level.
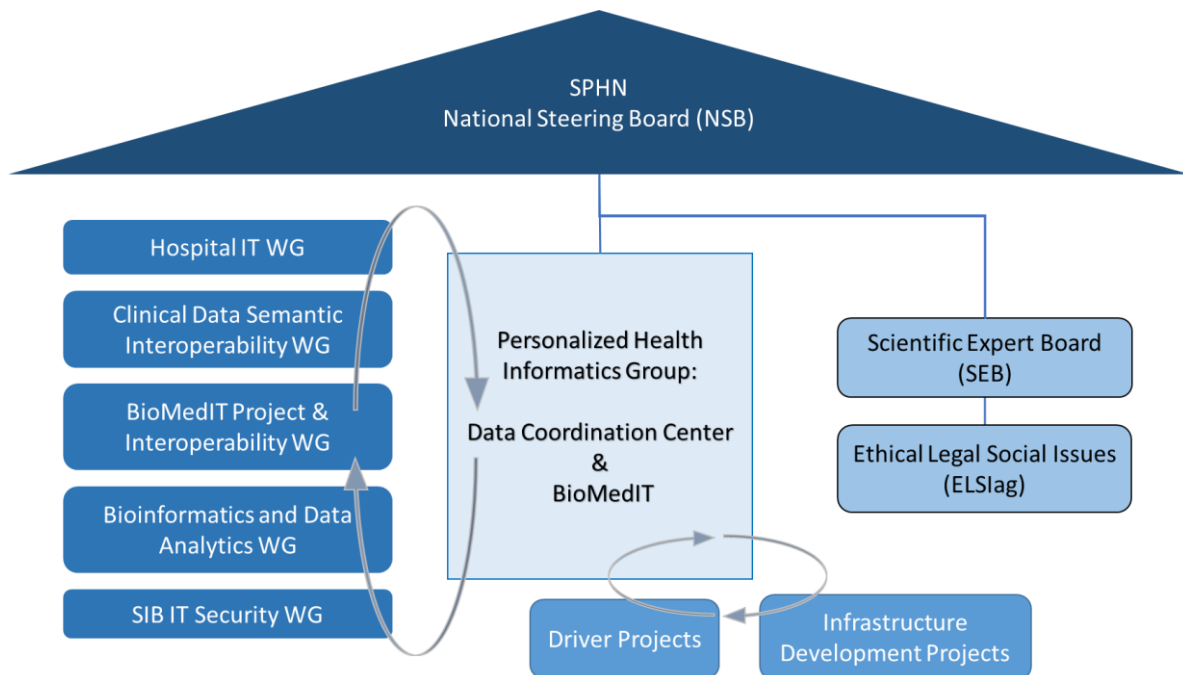
*Figure 1. High-level representation of the interaction between Hospital IT working group and the other DCC working groups.*

## 4.1  Interfaces

- University Hospitals
- Clinical Semantic Interoperability Working Group
- Personalized Health Informatics Group: Data Coordination Center (DCC) & BioMedIT
- Biomed IT Project and Interoperability Working Group
- Bioinformatics and Data Analytics Working Group
- SIB IT Security Working Group
- SPHN National Steering Board (NSB), SPHN Scientific Expert Board (SEB)
- SPHN Driver Projects and Infrastructure Development Projects

## 4.2  Scope

The focus in the years of 2019 and 2020: Collaboration Agreement and Focus Areas of the SPHN Initiative, Driver Projects and Infrastructure Developments Projects.


# 5  Organization

The HospIT WG is an advisory group and (at least) one working group member represents each University Hospital. The Working Group is open to representatives of other hospitals, institutions (e.g., eHealth Switzerland) and expert groups. The HospIT WG collaborates closely with the Data Coordination Center and its working groups and reports to the Director of the Data Coordination Center.

## 5.1 Tasks & Responsibilities

The **HospIT WG** is responsible for:

- Identifying and prioritizing IT technical needs that must be addressed in order to fulfill the SPHN collaboration agreement and harmonize the hospital IT processes nationwide.
- Defining work packages that will produce a set of recommendations on how to address the identified technical needs.
- Setting up work-package-related "Task Forces". A Task Force is defined as a time-limited technical group that addresses one specific work package and proposes a practical and harmonized solution.
- Managing and controlling the portfolio of work-packages-related activities.
- Evaluating and approving work packages' deliverables.
- Advising on strategic decisions regarding the evaluation and adoption of tools available on the market or produced by *SPHN Infrastructure Development Projects*, within the scope of the SPHN collaboration agreement.
- Defining harmonized integration plans of SPHN/DCC products (e.g., deliverables of DCC working groups, prototypes developed by SPHN infrastructure development projects) including the identification of technical gaps and limitations to be addressed.


The HospIT WG can set up several **Task Forces** that are time-limited technical sub-groups responsible for dedicated, technical work packages that will address specific IT technical needs. They are led by a technical expert and composed by one/two technical representatives per hospital. The task forces will follow best practices for the development of IT solutions/recommendations (e.g., the "v-model" https://en.wikipedia.org/wiki/V-Model_(software_development) and are responsible for:

- Delivering topic-specific solutions including (i) requirements specification, (ii) functional specification, and (iii) recommendations on design specification and quality assurance.
- Reporting to the members of the HospIT working group in order to get deliverables reviewed, validated and approved.
- Involving external experts, if needed.


### Working Group Chair

- Leads and represents the HospIT WG in front of the Personalized Health Informatics Group (PHI), the Scientific Expert Board (SEB) and the National Steering Board (NSB).
- Aligns HospIT WG needs with DCC strategy, roadmap and requirements
- Reports HospIT WG deliverables and recommendations to the DCC.
- Chairs the sessions and decides about agenda topics.
- Is responsible for the definition of yearly strategy and roadmap in agreement with all WG members.
- Is responsible for the implementation of working group strategy.

- Is responsible for the alignment with and the transparency to other players, in particular the DCC and DCC Working Groups.

# 6   Roadmap and Objectives for 2019

## 6.1   Operations

One of the University Hospital representatives of the Working Group chairs the HospIT Working Group. In order to provide sufficient continuity, the chair changes only once per year.

HospIT Working Group Members and Chair, year 2019:

- USZ:   Cornelia Kruschel (Chair), Katie Kalt
- HUG:   David Cavin
- CHUV: Nicolas Rosat, (Jean Louis Raisaro, Nathalie Jacquemont)
- USB:   Bram Stieltjes
- Insel:   Matthias Kämpf
- DCC:   Sabine Österle

At least one member per hospital must participate in meetings (F2F or remote) in order to discuss, take decisions, control task forces work progress and to discuss strategy and management topics.

The Working Group meets every second week remote by Video calls (30 min) or F2F (half a day) whenever needed but in minimum every two months (Bern).

## 6.2   Organizational Objectives:

| Nr. | Objective |
|-----|-----------|
| #1 | Approval of strategy 2019 |
| #2 | Official formation of Working Group 'Hosp IT' |
| #3 | Approval of basic funding by DCC |

## 6.3   Technical Objectives:

| Nr. | Objective / Task Force |
|-----|------------------------|
| #1 | Harmonization on de-identification of structured clinical data |
| #2 | Harmonization of data delivery formats (multiple formats) |
| #3 | Harmonization of data and meta-data management (code-book, data catalogue) |
| #4 | Implementation and operations of Clinerion |
| #5 | Harmonization of data delivery compliance (rules and check-points for delivering data) |
| #6 | Analysis of the BioMedIT data transfer protocol |
| #7 | Harmonization of the research ID method |
| #8 | Harmonization on de-identification of unstructured clinical data |

## 6.4 Organizational Needs and Financial Aspects

As a prerequisite to fulfill our mission and mandate, the Working Group requests to become an official Working Group of the Data Coordination Center within the SPHN initiative.

Furthermore, the Working Group needs to have a basic funding (jointly established between DCC and Hospitals) for all Working Group members, related meetings (advisory group and task forces) and for recruiting an IT project manager within the DCC who

- Works closely with the HospIT WG, and aligns and translates scientific needs with respect to achieving overall DCC interoperability goals within and across the projects.
- Coordinates the HospIT WG (set up meetings, following up on the various activities).
- Coordinates the various technical task forces (gathering requirements, set up meetings, write specification documents based on the input of technical experts from the hospitals, exploring state-of-the-art solutions on the market).

# 7 References

SPHN documents:
  I. SPHN Data Strategy V2 2017
  II. Collaboration Agreement